

Contract CO1: addFilePath

Operation: addFilePath(filePath: String)

Cross References : Use Case Process Trips

Pre-conditions:

- The file path is valid and points to a correctly formatted CSV file
- A CityCatalog object is created
- A ConnectionCatalog object is created

Post-conditions:

- Connection instances are created and their attributes are modified. (instance creation and attribute modification)
- City instances are created and their attributes are modified. (instance creation and attribute modification)
- Connection instances are associated with ConnectionCatalog. (formation of association)
- City instances are associated with CityCatalog. (formation of association)
- Connection instances are associated with Cities. (formation of association)

Contract CO2: editDepartureCity

Operation: editDepartureCity()

Cross References : Use Case Filtering Trips

Pre-conditions:

- A search object has been instantiated.
- The City with the name cityName exists and has been instantiated

Post-conditions:

- The departureCity attribute of the search instance is modified (attribute modification)

Contract CO3: editArrivalCity

Operation: editArrivalCity()

Cross References : Use Case Filtering Trips

Pre-conditions:

- A search object has been instantiated
- The City with the name cityName exists and has been instantiated

Post-conditions:

- The arrivalCity attribute of the search instance is modified (attribute modification)

Contract CO4: editDepartureTime

Operation: editDepartureTime()

Cross References : Use Case Filtering Trips

Pre-conditions:

- A search object has been instantiated
- The day represents a valid day (Mon, Tue...)
- The time represents a valid time (HH:MM)

Post-conditions:

- The departureTime attribute of the search instance is modified (attribute modification)
- The departureDay attribute of the search instance is modified (attribute modification)

Contract CO5: editArrivalTime

Operation: editArrivalTime()

Cross References : Use Case Filtering Trips

Pre-conditions:

- A search object has been instantiated
- The day represents a valid day (Mon, Tue...)
- The time represents a valid time (HH:MM)

Post-conditions:

- The arrivalTime attribute of the search instance is modified (attribute modification)
- The arrivalDay attribute of the search instance is modified (attribute modification)

Contract CO6: editTrainType

Operation: editTrainType()

Cross References : Use Case Filtering Trips

Pre-conditions:

- A search object has been instantiated.
- The name represents a valid train type (TGV, ICE...)

Post-conditions:

- The TrainType attribute of the search instance is modified (attribute modification)

Contract CO7: editDaysOfOperation

Operation: editDaysOfOperation()

Cross References : Use Case Filtering Trips

Pre-conditions:

- A search object has been instantiated.

Post-conditions:

- The daysOfOperation attribute of the search instance is modified (attribute modification)

Contract CO7: editSeatingClass()

Operation: editSeatingClass()

Cross References : Use Case Filtering Trips

Pre-conditions:

- A search object has been instantiated

Post-conditions:

- The SeatingClass attribute of the search instance is modified (attribute modification)

Contract CO8: editPriceOptions()

Operation: Use Case Filtering Trips

Cross References : Use Case Process Cost range Second Class

Pre-conditions:

- A search object has been instantiated

Post-conditions:

- The minCost and maxCost attribute of the search instance are modified (attribute modification)

Contract CO9: runSearch

Operation: runSearch()

Cross References : Use Case Search Trips

Pre-conditions:

- All the connections have been parsed by the system and are loaded
- The user has modified the search parameters to their according to their needs

Post-conditions:

- Trip objects corresponding to the Search objects' parameters are instantiated and their attributes are modified. (instance creation and attribute modification)
- The search instance is associated through a many-to-many connection to the trip instances. (association formed)

Contract CO10: editSortingOptions()

Operation: editSortingOptions()

Cross References : Use Case Sort Trips

Pre-conditions:

- A search object has been instantiated

Post-conditions:

- setSortBy and setOrder attributes of the search instance are modified (attribute modification)